



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

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February 9, 2010

### MEMORANDUM

**TO:** State Water Control Board Members

**FROM:** Ellen Gilinsky, Ph.D., Director, Water Division

**SUBJECT:** **Consideration of Petition to Designate Urbanna Creek as Exceptional State Waters**

#### Executive Summary

Staff intends to ask the Board at their March 18, 2010 meeting for a decision on whether or not to initiate a rulemaking to amend the Water Quality Standards regulation to designate Urbanna Creek and its tributaries as Exceptional State Waters (refer to the map in **Attachment 1**). Based on the site visit, staff has concluded that the creek does not meet the required eligibility criteria necessary for consideration of an Exceptional State Waters designation.

#### Background

At the July 23, 2009 meeting of the State Water Control Board, staff presented for Board consideration a citizen petition from the Town of Urbanna to designate Urbanna Creek from the mouth of the creek at Bailey Point up to and including Town Bridge Pond and all tributaries named and unnamed such as Glebe Swamp and Town Bridge Swamp as Exceptional State Waters. Urbanna Creek is a relatively short but wide tidal tributary on the south side of the Rappahannock River. The main-stem is approximately 3 miles long with an area of around 290 acres. The Town of Urbanna boundary extends to the centerline of the creek from its confluence with the Rappahannock to approximately  $\frac{3}{4}$  mile upriver. The remainder of the creek is within Middlesex County.

By unanimous vote at the July 2009 meeting, the Board directed staff to:

1. Proceed with notification to Middlesex County, the Town of Urbanna, and riparian landowners who would be potentially impacted by an Exceptional State Water

designation of Urbanna Creek and to provide these potentially impacted parties a 60-day opportunity for comment;

2. Publish in the Virginia Register the required notice of a 21-day comment period for the general public; and,
3. Appear before the Board after the close of the comment periods to provide a summary of the comments and the results of the staff site visit so that the Board can decide at that time what course of action to take on the petition.

“Tier III” is how the public commonly refers to those waters that are protected from water quality degradation through a prohibition on new or increased point source discharges. The equivalent regulatory terms are “Outstanding National Resource Waters” for EPA and “Exceptional State Waters” for Virginia.

### **Staff Site Visit**

DEQ guidance for the exceptional state waters program calls for a staff site visit to the nominated waterbody for confirmation that the candidate water meets the exceptional state waters eligibility criteria. The nominated water body must meet certain eligibility criteria to be designated and protected by an Exceptional State Water, or Tier III, designation. The nominated water body must exhibit an exceptional environmental setting **and** either support an exceptional aquatic community **or** support exceptional recreational opportunities which do not require modification of the existing natural setting.

**Attachment 1** presents staff findings from a site visit conducted October 9, 2009 of the entire tidal portion of Urbanna Creek. The staff site visit report also contains photographs of the waterbody under consideration.

The upper part of the creek is quiet and attractive. This portion has some sections of relatively undeveloped land with natural landscape and appropriate bird and animal habitat mixed in with a few homes. Urbanna creek, as it flows through Middlesex County and by the town of Urbanna, has about as much development, if not more, along its shores as other creeks of similar size in the lower Rappahannock River basin. As one progresses downriver, there is a moderate increase in the number of residences, docks, and boathouses and an increase in the amount of “hardened” shoreline (riprap or bulkheads to prevent erosion). Along the lower part of Urbanna Creek there are marinas, a hotel, yacht club, condominium development, numerous houses, as well as a sandy beach-type shoreline near the mouth.

Though the general environs of the creek are pleasant and the area rich in history and local culture, agency staff that conducted the site visit concur that Urbanna Creek does not meet the

crucial eligibility criteria of possessing an exceptional environmental setting for the following reasons:

- The natural features of the basin do not significantly contribute to the overall appearance of Urbanna Creek. It is comparable in appearance to many of the small coastal streams of the lower Rappahannock River tidal estuary.
- The creek is not a national wild and scenic river nor is it an integral component of any federal or state park, wildlife refuge, or wildlife management area. The only other Exceptional State Water designation in Virginia tidal waters (Ragged Island Creek) benefits from being part of a wildlife management area on one side of the water body and surrounded by a wide expanse of marsh on the other side. These factors have an isolating effect and provide buffering from development and anthropogenic impacts.
- The creek and its environs are not remote or undeveloped but rather characterized as a suburban/urban, developing area. Access to the entirety of the tidal portion of the creek is readily available to motorized boats and jet skis.

Existing Exceptional State Waters exhibit outstanding scenery without undue anthropogenic impacts and/or are located in remote areas and/or are part of a public protected area (national park/forest, Nature Conservancy lands, wildlife refuge or management area).

Also, based on the 2008 water quality assessment, Urbanna Creek is listed as impaired for the shellfish consumption use due to exceedences of the fecal coliform bacteria standard, and is also listed as impaired for the aquatic life use due to low dissolved oxygen and not meeting Chesapeake Bay shallow water submerged aquatic vegetation (SAV) uses.

### **Summary of Comments**

A full summary of comment received in response to the notification letters and the 21 day public comment period is provided as an attachment to this memo (**Attachment 2**).

Written comment was not received from Middlesex County or the Town of Urbanna.

Eight citizen comments in support of the nomination were received. Seven of them were identified as riparian landowners. Two citizen comments opposing the nomination were received. Both of these were identified as riparian landowners.

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**Attachments**

Attachment 1 – Urbanna Creek staff site visit report  
Attachment 2 – Comment summary

## **ATTACHMENT 1**

### **SITE VISIT REPORT**

# **Urbanna Creek Staff Site Visit Summary Report**

## **October 9, 2009**

### **Background**

The Town of Urbanna petitioned the agency to designate Urbanna Creek from the mouth of the creek at Bailey Point up to and including Town Bridge Pond and all tributaries named and unnamed such as Glebe Swamp and Town Bridge Swamp as Exceptional State Waters. Urbanna Creek is a relatively short but wide tidal tributary on the south side of the Rappahannock River. The main stem is approximately 3 miles long with an area of around 290 acres. The Town of Urbanna boundary extends to the centerline of the creek from its confluence with the Rappahannock to approximately  $\frac{3}{4}$  mile upriver. The remainder of the creek is within Middlesex County (See Appendix A).

There are 3 VPDES permits within the watershed.

1. Town of Urbanna Wastewater Treatment Plant (owner/operator HRSD). Discharge is to the main stem of the creek. Design flow 0.100 MGD.
2. Middle Peninsula Regional Security Center. Discharge location is an unnamed tributary to Urbanna Creek. Design flow 0.0250 MGD.
3. Yet to be built facility. Permit was originally issued for the first time on December 11, 2003 and expired on 12/10/2008. The proposed treatment facility will serve Middlesex Co.'s recently built Courthouse complex, the County's High School, and an undetermined number of local businesses in the Saluda area. Discharge location is planned to be in the same place as for #2 above. Design flow 0.0399 MGD.

Based on the 2008 assessment, Urbanna Creek is listed as impaired for the shellfish consumption use due to exceedences of the fecal coliform bacteria standard. Municipal point source discharges and non-point sources are listed as sources for the impairment. The creek is also listed as impaired for the aquatic life use due to low dissolved oxygen and not meeting Chesapeake Bay shallow water submerged aquatic vegetation (SAV) uses.

According to the DEQ Guidance Memorandum 04-2021, "Guidance for Exceptional State Waters Designations in Antidegradation Policy Section of Virginia Water Quality Standards Regulation (9 VAC 25-260-30.A.3)", three DEQ staff conducted a site visit to Urbanna Creek in an effort to determine if it meets the necessary eligibility criteria to be considered for Exceptional State Waters designation. The following factors are to be considered in determining whether a nominated water body meets the eligibility decision criteria.

### **Exceptional Environmental Settings**

The purpose of this category is to list those features which singly or in combination make a water body physically attractive. In order to meet the mandatory requirement that a water body nominated for Exceptional State Waters status provide an exceptional environmental setting, one or more of the following factors must apply:

- 1) the water possesses outstanding scenic beauty resulting from the natural features of the basin such as its topography, geology, ecology or physiography, or
- 2) the water has already received designation as a national wild and scenic river, or
- 3) the water represents an important component of a state or national park, forest, or wildlife refuge, or
- 4) the water includes remote, primitive or relatively undeveloped areas with public access by motorized vehicle restricted or unavailable.

In addition to providing an exceptional environmental setting, the candidate water body must either contain exceptional aquatic communities or exhibit exceptional recreational opportunities.

### **Exceptional Aquatic Communities**

In order to demonstrate that a water body nominated for Exceptional State Waters status contains an exceptional aquatic community, one or more of the following factors must apply:

- 1) the water supports an exceptional wild or natural fishery, or
- 2) the waters are designated as Class I or Class II wild natural trout streams according to the Virginia Department of Game and Inland Fisheries classification system (which is also referenced in DEQ's 9 VAC 25-260-370.B and 9 VAC 25-260-390 et seq.), or
- 3) the water contains an exceptional high diversity of aquatic species (fish or benthic macroinvertebrate) as categorized by the appropriate protocol for that water body type and species, such as the 95th percentile of the EPA's Rapid Bioassessment Protocol II method for measuring macroinvertebrate diversity in streams (Plafkin et. al., 1989) or the 95<sup>th</sup> percentile of biological metrics provided in more recent EPA bioassessment technical support guidance documents for wadeable streams and rivers (Barbour et. al., 1999), lakes and reservoirs (Gerritsen et. al., 1998) and estuarine and coastal marine waters (Bowman et. al., 2000).

### **Exceptional Recreational Opportunities**

In order to demonstrate that a water body nominated for Exceptional State Waters status exhibits exceptional recreational opportunities, the water must support recreational activities which do not require modification of the existing natural setting such as: fishing, canoeing, rafting, kayaking, tubing, birding, hiking, backpacking with primitive camping, or the like.

### **Observations**

The staff site visit observations are reported beginning with the most upriver segment accessible by boat downriver to the creek's confluence with the Rappahannock River.

Urbanna Creek is a relatively small tidal estuarine tributary located on the south side of the Rappahannock River. The most upriver portion has some marshland but the majority of the shoreline is characterized by relatively steep banks approximately 50 – 70 feet high that are heavily vegetated. Vegetation consists primarily of mixed deciduous forest with salt-tolerant brush and some areas of marsh grass at the base of the banks. Sandy beach-like shoreline is minimal in the upper reaches. Shoreline use consists of low-density residential. This region of the creek has very few houses and/or docks. Although the appearance of human impact is minimal, houses and/or docks/boathouses are visible from most vantage points within the creek (See Appendix B, Pictures 1-3).

There is a moderate increase in the number of residences, docks, and boathouses and an increase in the amount of "hardened" shoreline (riprap or bulkheads to prevent erosion) as one progresses downriver. Most of the creek banks continue to be rather steep though less heavily vegetated due to an increase in the number of waterfront dwellings and lawns. Boat docks and boat houses become more prevalent (See Appendix B, Pictures 4-7).

Just downriver of the bridge that spans Urbanna Creek on the Town of Urbanna side are three marinas that cater to recreational boaters and commercial fishermen. A little farther downriver are a 15 room hotel (Liberty at Compass Quay) and the town's municipal marina. On the opposite side is a private yacht club (Urbanna Harbour Yacht Club) and Rosegill Plantation, an estate dating from the mid-17<sup>th</sup> century and listed in the National Register of Historic Places (See Appendix B, Pictures 8-12). Several buildings in Urbanna and a portion of the town are also in the National Register.

Nearer the mouth of the creek, the shorelines broaden and the steep banks that characterized the upriver portions are a less prominent feature. Sandy beach-type shoreline is more prevalent. There is a condominium development and houses are numerous on the west side (town side) of the creek. The east

side is less developed as much of the land near the creek mouth is owned by the Rosegill estate (See Appendix B, Pictures 13-17).

### **Aquatic Life**

The creek is listed in the 2008 Final 305(b)/303(d) Water Quality Assessment Integrated Report as impaired for not meeting the aquatic life use due to low dissolved oxygen and not meeting Chesapeake Bay shallow water submerged aquatic vegetation (SAV) uses. No evidence suggests that Urbanna Creek possesses an exceptional aquatic life component.

### **Recreational Opportunities**

Urbanna Creek does offer limited opportunities for canoeing and kayaking particularly in the upper reaches. However, the bulk of recreational usage appears to be to provide a port and access to the Rappahannock River and Chesapeake Bay for the motor boating and sailing community. Public access on the creek is available by way of a public boat ramp in the upper end of the creek, the town marina/boat ramp (ramp fee required for non-residents), and private marinas. There is also a small, publically accessible town beach next to the municipal marina. Recreational fishing and crabbing opportunities are also available throughout Urbanna Creek.

### **Conclusions**

The upper part of the creek is quiet and attractive. This portion has some sections of relatively undeveloped land with natural landscape and appropriate bird and animal habitat mixed in with a few homes. Urbanna creek, as it flows through Middlesex County and by the town of Urbanna, has about as much development, if not more, along its shores as other creeks of similar size in the lower Rappahannock River basin. Though the general environs of the creek are pleasant and the area rich in history and local culture, agency staff that conducted the site visit concur that Urbanna Creek does not meet the crucial eligibility criteria of possessing an exceptional environmental setting for the following reasons:

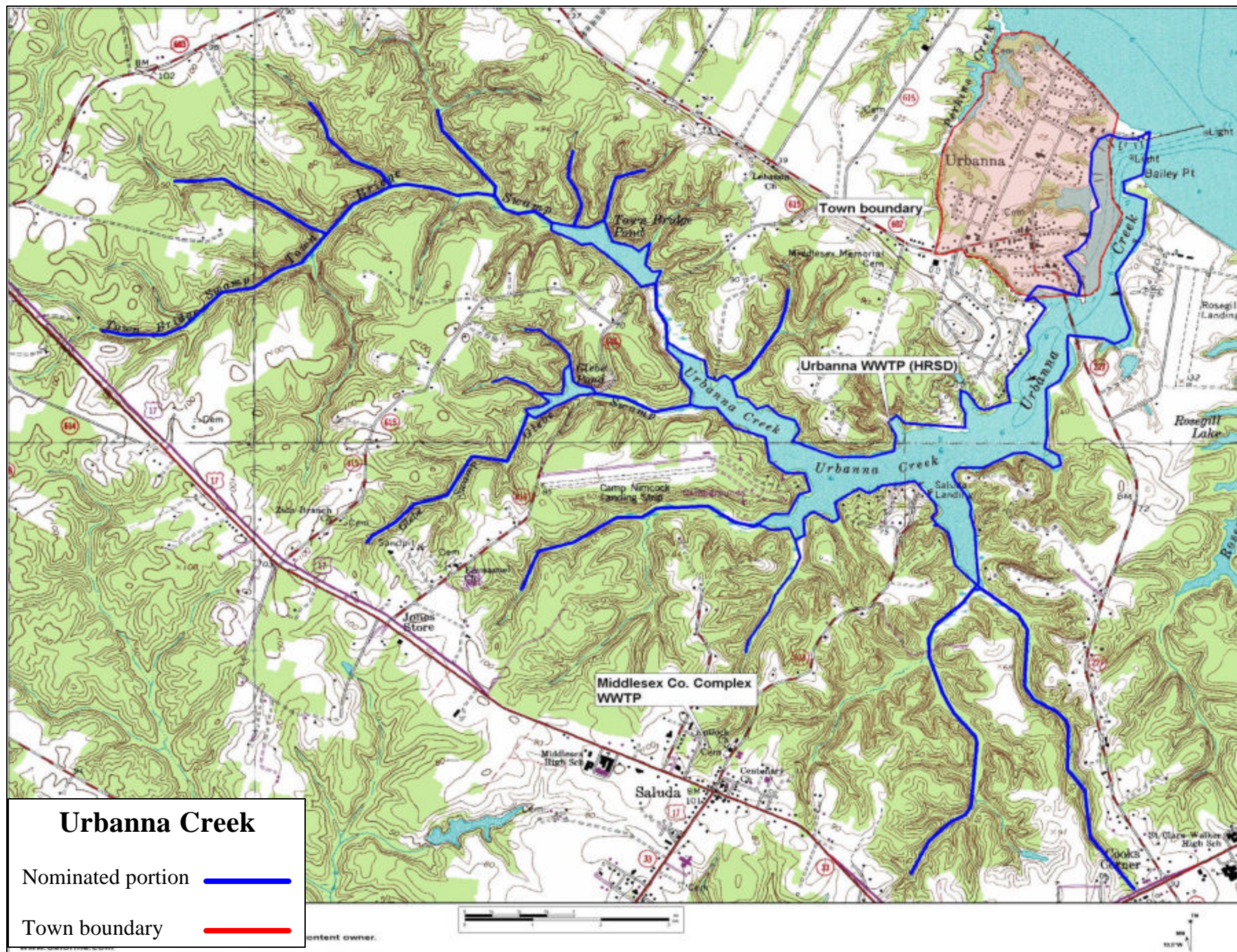
- The natural features of the basin do not significantly contribute to the overall appearance of Urbanna Creek. It is comparable in appearance to many of the small coastal streams of the lower Rappahannock River tidal estuary.
- The creek is not a national wild and scenic river nor is it an integral component of any federal or state park, wildlife refuge, or wildlife management area. The only other Exceptional State Water designation in Virginia tidal waters (Ragged Island Creek) benefits from being part of a wildlife management area on one side of the water body and surrounded by a wide expanse of marsh on the other side. These factors have an isolating effect and provide buffering from development and anthropogenic impacts.
- The creek and its environs are not remote or undeveloped but rather characterized as a suburban/urban, developing area. Access to the entirety of the tidal portion of the creek is readily available to motorized boats and jet skis.

Existing Exceptional State Waters exhibit outstanding scenery without undue anthropogenic impacts and/or are located in remote areas and/or are part of a public protected area (national park/forest, Nature Conservancy lands, wildlife refuge or management area).



## **APPENDIX A**







## **APPENDIX B**

**Picture 1.**



**Picture 2.**



**Picture 3.**





**Picture 4.**



**Picture 5.**



**Picture 6.**



**Picture 7.**





**Picture 8. Looking downriver towards Urbanna Bridge**



**Picture 9.**



**Picture 10. Urbanna Harbour Yacht Club**



**Picture 11.**





Picture 12.





**Picture 13.**



**Picture 14.**



**Picture 15.**



**Picture 16.**





Picture 17. Mouth of Urbanna Creek



## **ATTACHMENT 2**

### **PUBLIC COMMENT**

The Code of Virginia, section 62.1-44.15:4(B), requires the Board to provide written notification of Exceptional State Waters petitions to each locality in which the waterway lies and to make a good faith effort to provide notice to impacted riparian property owners. These riparian property owner notices are based on the names and addresses taken from local tax rolls provided by the Commissioners of the Revenue or the tax assessor's office of the affected jurisdictions at the request of the Board. A letter of notification and request for comment was sent to the potentially impacted localities and riparian landowners.

The nominated segment of Urbanna Creek is from the mouth of the creek at Bailey Point up to and including Town Bridge Pond and all tributaries named and unnamed such as Glebe Swamp and Town Bridge Swamp as Exceptional State Waters.

## LOCALITY COMMENT

None.

## UTILITIES

Hampton Roads Sanitation District (HRSD)	HRSD has provided wastewater treatment service to the Town of Urbanna since 1999. They state their current three consecutive year perfect compliance record for the discharge. The bacteria causing impairment and subsequent shellfish consumption closure is not a result of the compliant discharges because they are required to meet instream water quality criteria for bacteria and the impairment is originating with sources other than the treatment plant. They acknowledge that Tier 3 designation of the creek would not impact the Urbanna treatment facility at its current location and design flow but may have negative impacts by limiting future expansion of plant flow. Expansion may be desired to treat wastewater from other sources in Urbanna that may be contributing to the degradation of water quality in Urbanna Creek. They believe maintaining the current designation provides flexibility to support future needs of the town and protection of the creek.
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## CITIZEN COMMENT - SUPPORTING

### Overview

Number of riparian landowner comment <b>supporting</b>	7
Number of non-riparian landowner citizen comment <b>supporting</b>	<u>1</u>
Total	8

The majority of the supporting comment stems from stated personal experience with and recreational use of the Urbanna Creek and a desire to improve and maintain the water quality of the creek. Improving water quality is crucial in restoration of what was once an important oyster and crab fishery. Most also stated their belief that Urbanna Creek satisfies all necessary eligibility criteria to be considered for Exceptional State Waters designation.

The table below lists all citizens that provided comment in favor of the nomination.

	<b>Riparian Landowner - Supports</b>	<b>Non-Riparian Landowner - Supports</b>
1	<b>Montague Latane</b> – Lifelong user and landowner on the creek. He believes more stringent protection for the creek is necessary and Tier 3 designation is appropriate because Urbanna Creek meets all eligibility criteria. Urbanna Creek has a long tradition of supporting small boat sailing and cruising sailors from all over the world have made Urbanna a destination due to the beauty of Urbanna Creek.	<b>Bob Calves</b> – stated the creek’s unique characteristics of scenic beauty and historical significance. Swimming and boating has become unpleasant and aquatic life negatively impacted due to past & current pollution. Tier 3 would provide long term protection.
2	<b>Dorothy Lee</b> (on behalf of riparian landowner Mr. & Mrs. James B. Weston) – Supports the Tier 3 designation of Urbanna Creek. It does not make sense to pay high taxes for waterfront property and not be able to fully enjoy use of the waters due to degraded water quality. Wants Tier 3 designation to provide protection for the creek	
3	<b>Peter W. Mansfield</b> – Expressed full support for the town’s efforts to gain Tier 3 designation. He assured that, if elected to the Middlesex Co. Board of Supervisors, his support would continue.	
4	<b>James P. Mullins</b> – Expressed support for the designation and stated he could not see any reason not to grant the town’s request to designate.	
5	<b>Kerry Robusto</b> – Stated that any opportunity to clean up and protect the creek should be taken. Stated observation of a large variety of bird, animal, and aquatic life in and around the creek and the vital role the creek plays for them.	
6	<b>Bill Woodson</b> – Stated his support for the designation. Believes the State needs to improve efforts to protect the Chesapeake Bay and providing to its tributaries is an excellent start.	
7	<b>Franklin &amp; Barbara Wyker</b> – Supports designation. A Tier 3 designation would allow Urbanna Creek to once again be a source of seafood, improve wildlife habitat, provide for increased enjoyment of water sports, and be a benefit to the health of the Chesapeake Bay.	

## **CITIZEN COMMENT - OPPOSING**

### **Overview**

Number of riparian landowner comment <b>opposing</b>	2
Number of non-riparian landowner citizen comment <b>opposing</b>	0
Total	2

Opposing comment expressed concern that designating Urbanna Creek as Tier 3 would limit landowners use and/or development of property and could potentially place significant burdens on property owners due to discharge restrictions that accompany a Tier 3 designation. Opinion was expressed that Urbanna Creek does not meet eligibility criteria necessary for designation.

The table below lists all citizens that provided comment in opposition to the nomination.

<b>Riparian Landowner - Opposes</b>	
1	<p><b><u>Dollie B. Burrell (on behalf of the Clarence Gresham estate)</u></b> – Opposes the designation on the grounds that the nomination is arbitrary and capricious in that the description of the boundary is vague which is disadvantageous when trying to assess impacts to property owners. A Tier 3 designation would limit land use due to discharge restrictions required by such a designation.</p>
2	<p><b><u>Alfred P. Scott, Rosegill Farm</u></b> – Owner of Rosegill Farm that is being developed. The development will consist of a 700 unit residential community. The bio-membrane wastewater system will not result in a discharge. The effluent will be land applied through drainfields. The system is estimated to cost \$10 million. They state the above to illustrate their commitment to clean water for Urbanna Creek. They ask that the nomination be rejected because Urbanna Creek does not qualify for Tier 3 designations for the following reasons:</p> <ul style="list-style-type: none"> <li>• The creek is similar to hundreds of other creeks on major Virginia rivers.</li> <li>• The creek is polluted due to low dissolved oxygen and excessive bacteria.</li> <li>• The creek is a commercial harbor with marinas and boat slips.</li> <li>• The Town of Urbanna is increasing its own wastewater discharge due to the addition of campsites at the Bethpage Camping Resort which is tied into the Urbanna system.</li> <li>• The designation will impose significant burdens on other property owners by potentially banning future discharges of collected stormwater.</li> </ul>